

In a disclosed COC type semiconductor device, a bump electrode (21) of a second semiconductor chip (2) is joined to a first semiconductor chip (1) having a bump electrode (11) formed thereon. The bump electrodes (11) and (21) of the respective first and second semiconductor chips (1) and (2) are both made of first metal such as Au having a relatively high melting point, while a joining portion of these bump electrodes (11) and (21) is formed of an alloy layer (3) of the first metal and second metal, which second metal is made of such a material that can melt at a lower temperature than the melting point of the first metal to be alloyed with it. As a result, in the COC type semiconductor device, when interconnecting a plurality of semiconductor chips, their electrode terminals can be joined to each other without deteriorating the properties of these chips owing to the high temperature applied thereon.